

MARSHALL STAR

Serving the Marshall Space Flight Center Community

Oct. 28, 2010

'Go, see and understand' the value of CFC giving

Sign-ups still available for Combined Federal Campaign bus tours, service days

By Rick Smith

When you boil it down to its essence, the imperative that drives us to explore space is the desire – ubiquitous in the human experience – to go, to see and to understand. To learn, and to be better for that new knowledge.

The Marshall Space Flight Center's 2010 Combined Federal Campaign is nearing the end of its first month. Organizers encourage team members to join the final CFC bus tours and volunteer for Community Service Days activities – to go, to see and to understand the important work of local charitable organizations. To learn firsthand about the impact of such work across North Alabama.

Team members may still sign up for bus tours to Sci-Quest-The North Alabama Science Center Nov. 2 from 1-3 p.m., or the Huntsville-Madison County Rescue Squad Nov. 3 from 1:30-3:30 p.m.

Several Community Service Days activities still need

See CFC on page 3



Marshall aerospace engineer Vicky Garcia cheers for a Special Olympian during the annual Track & Field Day Event Oct. 19 at Milton Frank Stadium in Huntsville. Special Olympics is just one of many charitable organizations that benefits from Marshall support each year during Community Service Days - a critical element of the Combined Federal Campaign.

Marshall was project lead on Leonardo conversion

NASA managers give 'go' for launch of Discovery

By Sanda Martel

Space shuttle Discovery is scheduled to lift off Nov. 1 from Kennedy Space Center, Fla., on its last scheduled flight – an 11-day mission to the International Space Station. Launch time is 3:40 p.m. CDT.

The launch date was announced Oct. 25, at the conclusion of the STS-133 Flight Readiness Review, held by NASA managers before each mission. The review determines the

readiness of the shuttle's complex array of equipment, support systems and procedures, flight crew, payloads and the space station. It also assesses any risks associated with the mission.

Shuttle Discovery's primary payload is the Permanent Multipurpose Module, a large, reusable pressurized element originally used to ferry cargo back and forth to the space station. It is 21 feet long and 15 feet in diameter, and was formerly known as the Leonardo

Multipurpose Logistics Module. Engineers at the Marshall Space Flight Center were responsible for developing and integrating the modifications to convert it from Leonardo to a permanent fixture for the orbiting facility.

"The module will provide a much needed storage area on the space station and will be used for stowage, or whatever the astronauts need to

See Discovery on page 6

Director's Corner

'Please join me in participating in CFC 2010'

In marking Marshall's 50th Anniversary this year, we have looked to Marshall's past and present with our theme, "the work of generations," to salute the generations past and present who have advanced space exploration, spurred education and fueled this country's economic engine.

Last week we looked to our present and the future when we kicked off Marshall's 2010 Combined Federal Campaign with the theme "for future generations."

Our charitable giving to the community is a natural extension of our professional contributions to the nation. Through CFC, we support community service organizations, medical services, educational organizations, children, seniors, and many others.

The Combined Federal Campaign is almost as old as the Marshall Center. It was created 49 years ago to coordinate fundraising efforts so that federal employees would be solicited only once in the workplace and would have the opportunity to make charitable contributions through payroll deduction.

Marshall joined the CFC in 1985. Since then, our annual

contribution totals have almost tripled. Last year's goal was \$625,000. I was extremely proud

of this team when it pledged \$710,000. This year, in honor of our 50th Anniversary, we've increased our goal by \$50,000 to \$675,000. I have no doubt we will reach that goal by the time the campaign ends on December 10.

The Marshall Team has given its time, as well as its money. You served lunch at the Downtown Rescue Mission. You pitched in to help build a home for Habitat for Humanity and assisted with the Special Olympics Track & Field Day. Many of you have helped sign up needy families and seniors for the Salvation Army's Angel Tree program. This good work makes life better for everyone and truly knits our city into a community.

We all have full professional and personal lives. It's easy to forget about giving or to be uncertain about the best way to put our money to work. The CFC takes care of that for us by providing an easy way to make sure our giving is put to its best use.

You can choose a charity you want to support, or you can count on the CFC to use your donation wisely.

I know this is a time of uncertainty and transition – not only for us as individuals, but also for charitable organizations and the people who benefit from those services. It's even more important for us to lend a hand – both financially and as volunteers.

I encourage each of you to make a commitment to give what you can. Your generous donation can make our community – and, indeed, our world – a better place. If you haven't participated or not participated recently, I challenge you to start in what ever way you can.

Every time I see a Space Shuttle launch, I think it makes a statement about who this team is and what it stands for. When we give back to the community, it makes an equally important statement about who we are. Please join me in participating in CFC 2010.

Robert Lightfoot

Marshall Center Director

Swap out old books, CDs, DVDs, video games Nov. 17 during 'Swap It' event

In celebration of the Nov. 15 America Recycles Day, the Marshall Space Flight Center's Environmental Excellence Team is hosting an event called "Swap It." On Nov. 17 from 12-3 p.m., team members are invited to swap their books, CDs, DVDs and video games in Activities Building 4316. This encourages the reuse of items that may no longer be wanted or needed, but may be useful to others.

A pre-Swap It event will be held Nov. 3 from 12-3 p.m. in the Activities Building during the Flu Shot Clinic. Team members may begin dropping off their goods so items will be

available for swapping when the first person comes through the door Nov. 17.

Please bring commercially manufactured products only; no burned CDs or DVDs. Join the Environmental Excellence Team and help keep your unused items out of the landfill.

For more information about recycling at Marshall, visit http://recycling.msfc.nasa.gov/.

For more information about America Recycles Day, visit www.americarecyclesday.org.

2 MARSHALL STAR Oct. 28, 2010

volunteers: Christmas Charities seeks volunteers to wrap gifts for those in need Nov. 15, 17 and 22; to support its annual Can-a-thon food donation drive Dec. 2; and to help fill out applications and load supplies into vehicles Dec. 20-22. Habitat for Humanity needs volunteers for home-repair tasks Nov. 11, and the Huntsville Hospital Foundation seeks help delivering magazines to patients Nov. 19. For shift hours, activity locations and further details, follow the links on http://inside.msfc.nasa.gov/announcements/cfc_info.html.

The impact of the annual CFC experience and the associated activities hasn't been lost on those who have participated so far. The chance to give something back to the community was what compelled Luster Ingram, a computer engineer in the Engineering Directorate's Space Systems Department, to move beyond routine gift-giving by participating in a recent bus tour.

"CFC is great for the community," Ingram said. "This is our chance to help others." And, he noted, the bus tours and service days, which demonstrate the real-world value of Marshall contributions at the local level, make the CFC experience a richer one.
"They're the icing on the cake," he said.

They're also a special comfort, said Judy Milburn, a team lead in the Industrial Safety Branch of Marshall's Safety & Mission Assurance Directorate. Support of Community Service Days and the bus tours remind Milburn of the care given by non-profit hospice services to her grandmother, who had Alzheimer's disease.

"Near the end of her life, hospice came into her home and provided the care and support that were so essential at that specific time," she recalled. "My mother remains friends with the volunteer who provided comfort to both of them. Words cannot express the gratitude I have for the compassionate, understanding people who do this work."

Does participating in a bus tour or a service day activity change the way team members view the annual CFC drive? Maybe not, said Cynthia Frost, the 2010 CFC executive vice chairperson for bus tours – but it may change the way CFC impacts them personally.

"Until I put together these tours, I didn't really appreciate how many people are served by CFC organizations each year," said Frost, a flight operations lead in the International Space Station Vehicle Office at Marshall. "It's very powerful to see in person the broad range of support these organizations provide to the community, and to realize many of them simply can't meet the number of requests they get with their existing volunteer base.

"It gives you a real appreciation for the dedication of the people who do this work," she said. "Participating in CFC events didn't change the importance of the campaign in my mind, but it will change how much I give."

The Marshall Center's goal is to raise \$675,000 by the campaign's end Dec. 10.

Smith, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis & Communications.

'iCan' - and Marshall does!



Combined Federal Campaign advocate Tory Green of Huntsville, left, and the Grissom High School Band, right, were among headliners at the Marshall Space Flight Center's Oct. 21 rally for the 2010 CFC fundraiser. Marshall's CFC theme this year is "iCan – Now More Than Ever for Future Generations." Some 300



team members attended the rally, which included remarks by Center Director Robert Lightfoot, performances by the Alabama A&M University cheerleaders and refreshments and door prizes provided by the Marshall Exchange. To learn more or to contribute to CFC, visit http://cfc.msfc.nasa.gov.

Oct. 28, 2010 MARSHALL STAR 3

Station astronaut T.J. Creamer presents 24 Silver Snoopy Awards to Marshall team members

By Jessica Wallace Eagan

Twenty-four Marshall Space Flight Center team members were recently honored with Silver Snoopy Awards for outstanding contributions to the success of crewed spaceflight missions.

Silver Snoopy recipients receive a lapel pin depicting Snoopy, the dog from the comic strip "Peanuts," as an astronaut. Each of the pins has flown on previous space shuttle missions. Honorees also receive a framed certificate and a letter signed by NASA astronauts.

The awards were presented by International Space Station astronaut T.J. Creamer. Creamer returned to Earth aboard a Soyuz on June 1 after spending 161 days in space during the Expedition 22/23 missions.

Honorees from the Engineering Directorate were aerospace engineers Harold Gandy, Lucinda Murphy, Lisa Roth, John Townsend, Jeffrey West and Frank R. Zimmerman; Ronda P. Moyers, computer engineer; and Timothy Horvath, payload operations manager for Expedition 23/24.

Honorees from the Shuttle Propulsion Office were aerospace engineers Henry Dennis, Thomas O. Milner, Neill C. Murphy, Walter E. Stephens and Andrew L. Warren; and Leigh Ann Perkins, business lead for Propulsions Systems Engineering and Integration.

Honorees from the Safety & Mission Assurance Directorate were Jennifer J. Spurgeon and Chad W. Thrasher, both aerospace engineers; and Jimmy L. Hill, safety and occupational health specialist.

Cynthia Spraul, facilities engineer and planning lead at NASA's Michoud Assembly Facility in New Orleans, also was honored

Contractor honorees included John C. Kramer, system analyst for Colsa Corp. in Huntsville; Thomas A. Piff, engineer for Lockheed Martin Corp. in Huntsville; and David D. Ezell, materials engineer, Paul N. Galloway, senior systems engineer, Dwight L. Mosby, International Space Station payload instructor, and Melinda Lewis Danford, configuration management system engineer, all employees for Teledyne Brown Engineering Inc. in Huntsville.

For more information about the Silver Snoopy Awards, visit http://sfa.nasa.gov/sfaawards.cfm#snoopy.

Eagan, an AI Signal Research Inc. employee and the Marshall Star editor, supports the Office of Strategic Analysis & Communications.



Front row, from left, Andrew Warren, Melinda Danford, Thomas Milner and Lisa Roth. Second row, from left, Chad Thrasher, Jennifer Spurgeon, John Kramer, Dwight Mosby, John Townsend, Paul Galloway, Neill Murphy, Jeffrey West, Thomas Piff. Third row, from left, Marshall Center Director Robert Lightfoot, Leigh Ann Perkins, Harold Gandy, Cynthia Spraul, David Ezell, Lucinda Murphy, Timothy Horvath, Frank Zimmerman, Walter Stephens, Ronda Moyers, Jimmy Hill, astronaut T.J. Creamer and Henry Dennis.

4 MARSHALL STAR Oct. 28, 2010



Jerry Cook receives Sci-Quest award

Jerry Cook, right, manager of the Space Shuttle Main Engine Project at the Marshall Space Flight Center, receives a Quest for Excellence Award on Oct. 8 at the Sci-Quest Hands-On Science Center's "Mad Scientist Ball." Presenting the award is Daniel Adamek, Sci-Quest board member and committee chair for the ball, an annual fundraiser for the organization. Cook was honored for encouraging students to pursue careers in science, technology, engineering and mathematics. "It is a real honor to receive this award from an organization that does so much to encourage future generations of explorers and leaders to pursue careers in math, science, technology and engineering," Cook said.

Two Michoud employees receive top NASA honors



Two Michoud Assembly Facility employees recently were presented NASA awards by NASA astronaut Michael Foale. In photo at left, John Pucheu, left, director of operational readiness at Michoud, receives a leadership award for his exceptional dedication and service to the facility and to the space program. In photo at right, Chip Howart, left, a



videographer and photographer, receives the prestigious Silver Snoopy award for his outstanding performance contributing to flight safety and mission success. Less than 1 percent of the space program work force is awarded the Silver Snoopy annually. Michoud – a NASA-owned facility in New Orleans – is managed by the Marshall Space Flight Center.

Oct. 28, 2010 MARSHALL STAR

Marshall team invited to Native American Heritage Month celebration Nov. 4

To commemorate Native American Heritage Month, the Marshall Space Flight Center team is invited to a special event Nov. 4 from noon-1 p.m. at the U.S. Space & Rocket Center in Huntsville.

Participants will hear remarks by retired NASA astronaut John Herrington, a member of the Chickasaw Nation and a mission specialist on the STS-113 mission in 2002.

Flint-knapping, tepee-building and other customs will be demonstrated by members of the United Cherokee Ani-Yun-Wiya Nation, and Indian Frybread, an authentic Native American food, will be available for sampling. Traditional flutist Jimmy "Yellowhorse" Webster and dancer Tammera Hicks, both of Decatur, Ala., will perform in authentic regalia.

Marshall team members will be joined by personnel from Team Redstone, which includes U.S. Army organizations across Redstone Arsenal, and by some 300 students in grades 3-5 at Huntsville-area schools.

"We're pleased to join our hosts, colleagues and local schoolchildren to honor the work of Native Americans who have contributed over the decades to the success of the Marshall Center, Huntsville and the nation's space program," said Willie Love, assistant director of Marshall's Office of Diversity and Equal Opportunity.

Buses will transport Marshall team members to the Space & Rocket Center from 11:15 a.m. to 12:15 p.m. Pickup points include 4200, 4203, 4600, 4610, 4612 and 4487. Buses will begin returning to Marshall at 1 p.m. See Inside Marshall for complete bus route details.

For more information, contact event chairperson Cindy Spidel at 544-0144 or Love at 544-0088.

Discovery Continued from page 1

use it for," said Shawn Reagan, manager of the Multipurpose Logistics Modules.

"As the system integrator – working with Johnson Space Center in Houston, which managed the contract, and the Italian Space Agency, that built Leonardo – we modified the module from an element designed to be on orbit for two weeks to a permanent attachment on the space station," said Reagan.

"Between 12 and 15 Marshall employees worked on this conversion," he said. The Italian Space Agency contracted with Thales Alenia Space Italy of Cannes, France, Leonardo's designer and manufacturer, to perform the conversion. Work was performed at Kennedy Space Center.

To transform an existing logistics carrier used for 10 years into a permanent module for an additional 10-year life, modifications were required, including reinforcement of external debris panels; removal of equipment to reduce weight; changes to facilitate on-orbit maintenance; software upgrades to accommodate the equipment that was removed; installation of shielding material to protect the module commensurate with other space station modules; and upgrades to increase the ability of the module to withstand impacts from space debris."

Leonardo made its debut flight on Discovery's STS-102 mission in March 2001. Other missions flown include STS-102 and STS-105 in 2001; STS-111 in 2002; STS-121 in 2006; STS-126 in 2008; STS-128 in 2009; and STS-131 in April.

Also aboard Discovery when it lifts off will be Robonaut 2, the first human-like robot in space, and critical spare components for the orbiting complex. Robonaut 2 will become a permanent resident on the space station.

STS-133 is the last shuttle mission of 2010. The last scheduled shuttle mission – STS-134 – is targeted to launch in February 2011.

For more information about the STS-133 mission, visit: http://www.nasa.gov/mission_pages/shuttle/main/index.html.

Martel, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis & Communications.



The Permanent Multipurpose Module in Discovery's payload bay.

6 MARSHALL STAR Oct. 28, 2010

October is National Cybersecurity Awareness Month

Marshall developing program to raise awareness on cybersecurity

Most computer users know about viruses, spyware and the software that prevents you from having a "bad computer day." But do you know about hidden programs on websites that could infect your computer, the need for privacy settings on social networking sites and the best practices when your inbox is flooded with messages from the latest e-mail worm?

All of these topics are a part of the emphasis of National Cybersecurity
Awareness Month – a campaign that began in 2004 to help keep Internet users safe year round. President Barack Obama declared this month Cybersecurity
Awareness Month to "recognize the risk

of cyber attacks and the important steps we can take to strengthen our digital literacy and cybersecurity."

The Marshall Space Flight Center's Office of the Chief Information Officer has developed a program called Digital Information Security Champions. This group of IT professionals from across Marshall will partner with the center's community to raise awareness, assist in establishing the most secure computing practices and show the positive benefits of increasing information security effectiveness.

The program also will promote educational opportunities, and share information about the best practices

of information security and the importance of protecting the assets, data, intellectual and technical ideas of Marshall and the agency. The team plans to research and provide resources that can be shared during staff meetings, and will coordinate events during the year to raise security awareness. The goal is for computer users to become better informed at work and at home, and then in turn, share that knowledge with their families and friends.

For more information on the Digital Information Security Champions program, contact Judy Darwin at judy.a.darwin@nasa.gov.

Classified Ads

To submit a classified ad to the Marshall Star, go to Inside Marshall, to "Employee Resources," and click on "Marshall Star Ad Form." Ads are limited to 15 words, including contact numbers. No sales pitches. Deadline for the next issue, Nov. 4, is 4:30 p.m. Thursday, Oct. 28.

Miscellaneous

Solid oak hutch with glass doors at top, 40"w x 18"d, \$125, 256-881-0457

Solid oak entertainment center, 98"w x 24"d x 76"h, includes free projection TV, \$800. 256-830-1820

Ethan Allen corner desk and upper cabinet, photo available, \$150. 256-520-6295

Wooden doll house from Germany, hand painted wooden furniture. 256-539-1316

Washer/dryer, \$400; washer, \$150. 256-652-6233

Walker; high chair; infant car seat; sofa table; TVs. 256-990-4243

Baby bottle warmer, \$10; baby wipe warmer, \$10. 256-714-0800

Two RTF E-Flight Alfa Warbirds; F4U-1A Corsair and Ki-84 Frank with HiTech XMTR, \$300. 256-508-1558

Brinkman three burner SS grill with rotisserie, side burner, \$100. 256-975-9480

Propane water heater, \$150; fireplace logs, \$100; black powder rifle; two compound bows. 256-651-1137

Aluminum extension ladder, 24-foot, type three, \$60. 256-655-6348

Craftsman garage door opener, 1/3 HP, needs gear, \$30. 256-837-6776

Dell Dimension 4300 desktop, 640MB Ram, 40GB HD, Nvidia GeForce2, 17in flat panel, \$125. 256-603-0741

Playstation 3 game, Little Big Planet, Game of the Year edition, rated E, \$25. 256-828-1234

Five piece junior drum set. 256-656-0381

Two Apple Iphone 3GS- 32GB, accessories, \$250 each. 256-426-6026

DVD rack. 256-777-8229

Five tickets, Nashville Predators vs Chicago Blackhawks, 1/15/11, Bridgestone Arena, Section 323, \$200. 256-724-0534

Two tickets, Beauty and the Beast, lower balcony, front row center, VBC, 1/28, \$100. 256-617-1631

Vehicles

2008 Honda Civic LXI, 30K miles, \$14,800. 256-461-9305

Cattle trailer, 16' long, \$850; 1994 F-150 XL Ford truck \$2,580. 256-731-9258

Wanted

Houses/offices to clean, available evenings and weekends. 256-777-8595, leave message

Looking for drummer to play in a hard rock cover band. www.screamingharmon.com

Oct. 28, 2010 MARSHALL STAR 7

Oct. 28, 2010 MARSHALL STAR

THE FACE OF MISSION SUCCESS IS: Morgan Abney

Aerospace engineer and Environmental Control and Life Support Systems, or ECLSS, atmosphere revitalization loop closure development lead in the ELCSS Development Branch

Organization: Engineering Directorate

Joined NASA: September 2008

Education: Bachelor's degree in chemical engineering, Vanderbilt University, Nashville, Tenn., 2003; doctorate in chemical engineering, University of Kentucky, Lexington, 2007

Responsibilities: My work is primarily focused on the reduction of metabolic carbon dioxide. I am tasked with identifying and developing new technologies to recover oxygen from carbon dioxide by reducing carbon dioxide to more preferable products, such as methane or synthesis gas. I also am responsible for identifying interfacial technology, including separation systems and post-processors, when necessary.

How do you hope to contribute to Marshall's future goals?

I hope to play a fundamental role in the development of technology that will revolutionize air life support systems. I want to develop a technology that flies on a mission to Mars, keeping astronauts breathing high quality air and minimizing wastes. I also enjoy mentoring, particularly college students. I want to continue to bring interns into ECLSS, and offer them projects that give them an appreciation for the natural balance of Earth's environment



and the complexity of mimicking that in space. I hope to inspire a passion for all things NASA, and send them back to college with a life-long interest in the fate of our manned-spaceflight program.

What is something people would be surprised to find out about you? My husband is a huge Harley-Davidson fanatic. Thus, I have cultivated my own biker-chick persona. No one ever expects to see me rocking my chaps. (Yes, with a fringe.)

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